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## **BISBEE MUNICIPAL AIRPORT** **Bisbee, Arizona**

### AIRPORT MASTER PLAN - 1999 ENVIRONMENTAL FACTORS

#### INTRODUCTION: THE ENVIRONMENTAL REVIEW PROCESS

The National Environmental Policy Act (NEPA) requires that all new airport construction be evaluated in terms of possible environmental impacts. Thus, it is important in the Master Planning process to identify the environmental issues which may need to be addressed prior to airport development.

Federal actions fall into one of three categories:

- Categorical Exclusions;
- Actions normally requiring an Environmental Assessment (EA); and
- Actions normally requiring an Environmental Impact Statement (EIS).

In general terms, actions categorically excluded are those actions which are found to have no potential for significant environmental impact. The following items would normally be categorically excluded unless extraordinary circumstances are identified by the FAA which would create a requirement for an Environmental Assessment. "Extraordinary circumstances" include opposition by federal, state or local government agencies, or by a significant number of persons who would be affected by the action, as well as any obvious circumstance which may indicate the potential for environmental impact.

- Runway reconstruction or repair work where the runway's alignment, length, capacity and classification are not affected;
- Construction or repair of taxiways, aprons or loading ramps;
- Installation or upgrade of airfield lighting systems, including runway and taxiway edge lighting systems, runway end identifier lights (REIL), visual approach aids (VASI, PAPI), rotating beacons, and electrical distribution

systems;

- Installation of miscellaneous items including segmented circles, wind or landing direction indicators, weather stations, and fencing;
- Construction or expansion of buildings and passenger handling facilities, including general aviation arrival/departure building and hangars;
- Construction, relocation or repair of entrance and service roads;
- Obstruction removal on airport property;
- Erosion control actions with no off-airport impacts;
- Landscaping or construction of airport jet blast and/or noise mitigation barriers, as well as projects to carry out noise compatibility programs;
- Land acquisitions and/or relocations associated with any of the above listed items.

Federal release of airport land, removal of a displaced threshold, airspace determinations, airport planning projects, noise compatibility programs, acquisition of security equipment required under 14 CFR Part 107 or safety equipment required under 14 CFR Part 139, acquisition of snow removal equipment, airport certifications, and preliminary or tentative engineering or design actions are also categorically excluded.

Actions normally requiring an Environmental Assessment are those which have been found by experience to sometimes have significant environmental impacts. Included actions are:

- Airport location or relocation;
- Construction of a new runway;
- Major runway extension;
- Runway strengthening which would result in a 1.5 Ldn or greater increase in noise over any noise sensitive area located within the 65 Ldn noise exposure contour;
- Entrance or service road development which would adversely affect the capacity of other public roads.
- Land acquisition associated with any of the above-listed items, or land acquisitions which result in relocation of residential units when there is evidence of insufficient replacement dwellings or major disruption of business activities;
- Land acquisition which involves land covered under Section 4(f) of the DOT Act (public owned land from a public park, recreation area or wildlife or waterfowl refuge, or a historical site of local state or national significance);
- Establishment or relocation of an instrument landing system, or an approach lighting system;
- Any action which would effect property included (or eligible for inclusion) on the National Register of Historic Places, property of state, local, or national historical, architectural, archeological, or cultural significance;
- Land acquisitions which involve significant conversion of farmland

Actions determined to have significant impacts during preparation of the Environmental Assessment will be required to be addressed by an Environmental Impact Statement (EIS).

The preparation of the Environmental Assessment is the responsibility of the airport sponsor. Based upon the results of the Environmental Assessment, the FAA would either prepare an Environmental Impact Statement (EIS) or would issue a "Finding Of No Significant Impact" (FONSI).

Federal regulations require that a sponsor seeking a grant for airport improvements must prepare and submit an Airport Layout Plan, showing detailed information regarding the existing and proposed facility, along with an Environmental Assessment prepared in accordance with FAA Order 5050.4, if an assessment is required.

PROBABLE  
ENVIRONMENTAL  
IMPACTS

The areas of potential impact which must be addressed in an Environmental Assessment, per FAA Order 5050.4 are as follows:

- A. Noise
- B. Compatible Land Use
- C. Social Impacts
- D. Induced Socioeconomic Impacts
- E. Air Quality
- F. Water Quality
- G. Impacts upon Public Recreation Areas and Historical/Cultural Resources
- H. Biotic Communities - Flora and Fauna
- I. Endangered and Threatened Species of Flora and Fauna
- J. Wetlands
- K. Floodplains
- L. Coastal Zone Management Programs and Coastal Barriers
- M. Wild and Scenic Rivers
- N. Conversion of Farmland
- O. Energy Supply and Natural Resources
- P. Light Emissions
- Q. Solid Waste Impacts
- R. Construction Impacts

Each of these areas of potential impact are discussed in the following narrative.

In June of 1999, in order to identify possible areas of environmental impact associated with the proposed program, a number of public agencies were contacted, provided with

review materials, and asked to provide input regarding their areas of jurisdiction. The contacted agencies are:

- ▶ Arizona Department of Environmental Quality, Wastewater Construction and Federal Permits Unit
- ▶ Arizona Department of Environmental Quality, Office of Air Quality
- ▶ Arizona Department of Environmental Quality, Office of Water Quality
- ▶ U.S. Army Corps of Engineers
- ▶ Arizona State Parks Department, Historical, Cultural, and Archeological Resources
- ▶ U.S. Fish and Wildlife Service
- ▶ Arizona Game and Fish Department
- ▶ Arizona Department of Water Resources
- ▶ Arizona Commission of Agriculture and Horticulture
- ▶ Arizona State Land Department
- ▶ U.S. Bureau of Land Management
- ▶ U.S. Department of Agriculture, Soils Conservation Service
- ▶ U.S. Department of Agriculture, Farm Services Agency
- ▶ Arizona Department of Transportation, Environmental Planning

#### Aircraft Noise

A noise analysis is not required by the Federal Aviation Administration for airport proposals which involve utility or transport airports whose forecast annual operations within the period covered by an Environmental Assessment do not exceed 90,000 annual propeller operations or 700 jet operations.

According to the forecasts developed in Section 2, propeller activity will remain below this threshold level during the period under study. However, activity by jet aircraft may exceed 700 annual operations during the planning period. The forecasts do not distinguish between jet and turboprop operations, but indicate the possibility of as many as 1,900 operations by turbine-powered fixed wing types. Therefore, a noise analysis was undertaken.

The Federal Aviation Administration defines 65 Ldn as the threshold of significance for noise exposure impacts, and requires that the Integrated Noise Model (INM) computer program be used to define noise exposure levels.

The "Ldn" noise metric ("Day-Night Average Sound Level" - sometimes called "Dnl") is defined as the 24 hour average of an energy summation of A-weighted decibel levels (dbA), with night operations weighted by a 10 decibel penalty.

The Department of Housing and Urban Development (HUD), has published noise abatement and control standards in its Circular 1390.2 in an effort to separate uncontrollable noise sources from residential and other noise sensitive areas, and to prohibit HUD support for construction within sites determined to have unfavorable

noise exposure conditions. A rating of less than Ldn 65 is considered acceptable for residential development. Ldn 65 to 75 is defined as discretionary and a rating of more than Ldn 75 is considered unacceptable for residential development.

The INM noise modeling was performed for both the existing (1999) and the ultimate (2020) term. The following assumptions were made:

- ▶ Percentage of runway use was estimated as follows:

	<u>1999 Scenario</u>	<u>2020 Scenario</u>
Runway 17 .....	45%	35%
Runway 35 .....	45%	35%
Runway 2 .....	5%	15%
Runway 20 .....	5%	15%

- ▶ Landing tracks were modeled based on approximate standard traffic patterns for uncontrolled fields.
- ▶ Departure tracks were modeled to assume no turns before reaching 500 feet above ground level, with climb degraded to as much as 250 feet per minute at 70° F. Departures to the south were assumed to remain within U.S. airspace.
- ▶ All Runways were assumed to have left traffic patterns.
- ▶ Standard INM composite aircraft models were selected to represent each of the fixed wing categories included in the forecasts.
- ▶ It was assumed that daylight activity will account for 90% of total operations, evening activity will account for 5%, and operations at night will account for the remaining 5%.
- ▶ The INM does not provide for rotorcraft operations or types, and rotorcraft may not typically use the runway environment and fixed-wing traffic patterns. However, rotorcraft operations were considered as fixed wing types in order to provide a conservative result.
- ▶ The noise generated by trucks and automobiles on the adjacent Bisbee Junction Road, and by trains on adjacent railroad tracks, were not considered in this analysis. The INM software considers only fixed wing aircraft noise.

The resulting 65 Ldn noise contours are illustrated on Sheet 7 of the Airport Layout Plan (Airport Land Use Drawing).

Currently (1999), the 65 Ldn contour is located primarily on airport property, but extends to the north about one mile over City owned land that is used for sewage

treatment lagoons. The contour also extends to the south about ½ mile over undeveloped land to Bisbee Junction.

In the ultimate scenario (2020), the 65 Ldn contour over Runway 17-35 will not change significantly from the 1999 contour. However, because the planned Runway 2-20 improvement, the 65 Ldn contour will extend along the approach surfaces to the northeast and southwest about one mile. In all cases, the 65 Ldn contour is located over undeveloped land.

There are no significant noise impacts evident according to the results of the INM analysis.

#### Comments by Jurisdictional Agencies:

After review of draft information, the Arizona State Land Department requested inclusion of maps identifying projected noise levels over land adjacent to the airport (See Exhibit F at the end of this section). The 65 Ldn noise contours are illustrated on Sheet 7 of the Airport Layout Plan (Airport Land Use Drawing).

#### Compatible Land Use

Land-use compatibility conflicts are a common problem around many airports and smaller General Aviation facilities. In urban areas, as well as some rural settings, airport owners find that essential expansion to meet the demands of airport traffic is difficult to achieve due to the nearby development of incompatible land uses.

The issue of aircraft noise is generally the most apparent perceived environmental impact upon the surrounding community. In order to determine the potential noise exposure to the area around the airport the potential noise exposure was analyzed as described above. The noise analysis section describes the results in terms of impact to adjacent land uses. It is important to consider that the results are only true if real events match the conditions assumed in the model.

Based on the noise analysis and on a review of the land use adjacent to the airport, performed during the course of preparing this Master Plan, there are presently no existing or future adjacent incompatible land uses affecting the airport.

Conflicts may also exist in the protection of runway approach and transition zones to assure the safety of both the flying public and the adjacent property owners. Adequate land for this use should be either owned in fee or controlled in easements, as recommended in this Master Plan.

The *Airport Environmental Handbook* states that an Environmental Assessment shall document "the required sponsors assurance under section 511(a)(5) of the 1982 Airport Act that appropriate action, including the adoption of zoning laws, has been or will be taken, to the extent reasonable to restrict the use of land adjacent to or in the immediate vicinity of the airport to activities and purposes compatible with normal airport operations, including landing

and takeoff of aircraft. The assurance must be related to existing and planned land uses". (Page 31, paragraph 2b). Ideally, the City of Bisbee should undertake a land use study with an ultimate objective to create additional land use controls to reduce the noise impact to future residential areas.

There are several sources of information available for the planning and implementation of land use controls. These are:

1. The Arizona Airports Land Use Compatibility Study, Volume V of the Arizona Aviation System Plan (December 1992), prepared by the Arizona Department of Transportation, Aeronautics Division.
2. Appendix A, Federal Aviation Regulations (FAR), Part 150.
3. FAA Advisory Circular 150/5050-6, Airport-Land Use Compatibility Planning.
4. FAA Advisory Circular 150/5020-1, Noise Control and Compatibility Planning for Airports.
5. FAA Advisory Circular 150/5190-4A, A Model Zoning Ordinance to Limit Height of Objects Around Airports.

As a minimum, the airport-related ordinances that should be considered for land use control are:

- Height hazard ordinances
- Noise ordinances
- Land use ordinances

#### Comments by Jurisdictional Agencies:

After review of draft information, the Arizona State Land Department requested consideration of potential impacts to adjacent land uses if larger aircraft use the facility in the future, commenting that "No mention was made of the types of aircraft that will be using the airport". Section 2 of this Master Plan concludes that use of the airport by larger jet and turboprop aircraft will increase only slightly within the 20 year planning period, from an estimated 1,824 annual operations in 1999 to 1,915 in the year 2020. inclusion of maps identifying projected noise levels over land adjacent to the airport. This agency also requested that existing and/or proposed adjacent land uses be addressed in the Master Plan. Airport land uses are now described on Sheet 7 of the Airport Layout Plan (Airport Land Use Drawing). (See Exhibit F at the end of this section)

Social Impacts

These are impacts which arise from the disruption of communities, relocation of persons, changes in employment patterns and changes in transportation patterns.

No relocation of persons, or changes in employment or major changes in transportation patterns are necessary with the proposed plan of development. Therefore, no impacts associated with the planned development are foreseen.

**Comments by Jurisdictional Agencies:**

No comments by jurisdictional agencies were received regarding Social Impacts.

Induced  
Socioeconomic  
Impacts

These secondary or indirect impacts involve shifts in population, changes in economic climate, or shifts in levels of public service demand. The effects are directly proportional to the scope of the project under consideration.

Assessment of socioeconomic impacts is usually associated with major development at larger air carrier airports, which involve major terminal building development of roadway alignments, and similar work. The extent of the indirect socioeconomic impacts of the proposed development is not of the magnitude that would normally be considered significant.

**Comments by Jurisdictional Agencies:**

No comments by jurisdictional agencies were received regarding Socioeconomic Impacts.

Air Quality

The Federal Aviation Administration, through FAA Order 5050.4A, *Airport Environmental Handbook*, includes an established procedure which is followed in order to determine whether an air quality analysis is necessary for a proposed airport development action.

The initial step in this process is to determine whether the anticipated project involves airport location, runway development or other physical airside and/or landside improvements which increase airport capacity.

Assuming that the increase in activity shown in the forecasts might indicate a potential for increased impacts to air quality, the next step in the process is the determination of whether or not the airport is within a state within direct source review (ISR)

The state of Arizona is not an ISR state. This being the case, the threshold criteria contained in the FAA *Airport Environmental Handbook* must be examined in order to determine if an assessment of air quality is required. According to the *Handbook*, no air quality analysis is required if the levels of activity forecast in the time frame of the proposed action are below either of the following.



- For commercial service airports: Less than 1.3 million annual passenger and less than 180,000 annual general aviation operations.
- For general aviation airports: Less than 180,000 forecast annual operations.

For the planning year 2020, the total annual operations (high-range) forecast for Bisbee Municipal Airport is 22,061. It is evident from the number of forecasted operations for Bisbee Municipal Airport that neither of these criteria will be exceeded. An air quality assessment should not be required.

The 1982 Airport Act requires that Airport Improvement Program applications for projects involving airport location, runway location, or a major runway extension shall not be approved unless the governor of the state in which the project is located certifies that there is "reasonable assurance" that the project will be located, designed, constructed and operated in compliance with applicable air quality standards. A runway extension for 2-20 has been programmed in the Master Plan. An Environmental Assessment will be required to be prepared for the runway extension.

**Comments by Jurisdictional Agencies:**

No comments by jurisdictional agencies were received regarding Air Quality.

Water Quality

The 1982 Airport Act also requires that Federal Airport Improvement Program (AIP) applications for projects involving airport location, runway location, or a major runway extension shall not be approved unless the governor of the state in which the project is located certifies that there is "reasonable assurance" that the project will be located, designed, constructed, and operated in compliance with all applicable water quality standards. As with the air quality assurance for the proposed runway extension, this certification should be applied for as part of an EA process, through the Arizona Department of Environmental Quality (ADEQ).

The Airport Environmental Handbook states that any Environmental Assessment required for an airport activity shall include descriptions of design, mitigation measures and construction controls to indicate that any water quality standards and permit requirements are met on a Federal, State, and/or local level. This stipulation can apply to storm and sanitary sewers, water supply and waste treatment, erosion controls, fuel spill containing, and drainage design. This Master Plan for Bisbee Municipal Airport does include the potential expansion of the water and sanitary sewer system. The City is also planning to install a water tank which will be used for fire protection for the City. While these activities may occur in the future, they, by themselves, do not normally create a requirement to produce an Environmental Assessment.

A storm water permit must be applied for through ADEQ prior to commencement of construction activities if clearing, grubbing and excavation activities disturb more than

five acres of land. Grading of less than five acres will also be required to be permitted if it is part of a larger development plan.

If construction activities involve channelization or earthmoving within a "Water of the United States", a 404 permit will need to be obtained from the U.S. Army Corps of Engineers prior to commencement of construction.

Potential short-term impacts to water quality caused by construction activity (erosion and sediment transport) must be addressed for each construction project in specifications.

**Comments by Jurisdictional Agencies:**

The Department of the Army, Los Angeles District Corps of Engineers has commented that a Section 404 Permit may be required for some of the proposed airport improvements recommended in this master Plan (*see Exhibit G at the end of this section*).

Impacts Upon Public  
Recreation Areas and  
Historical/Cultural  
Resources

Section 4(f) of the DOT Act states that the "*Secretary shall not approve any program or project which requires the use of any publicly owned land from a public park, recreation area, or wildlife and waterfowl refuge of national, state or local significance as determined by officials having jurisdiction thereof unless there is no feasible and prudent alternative to the use of such land and such program or project includes all possible planning to minimize harm resulting from the use.*"

The proposed improvements will have no significant impacts upon existing parks, established waterfowl/wildlife refuges or recreation areas.

If an Environmental Assessment is required prior to design and construction of a proposed project, we recommend that an archaeological survey be included as part of the EA process. In the event that there may be existing cultural resources in the development area, construction project specifications should require that projects be temporarily stopped if any cultural resources are found during construction.

**Comments by Jurisdictional Agencies:**

No comments by jurisdictional agencies were received regarding Impacts Upon Recreation Areas and Historical/Cultural Resources.

Biotic Communities -  
Flora and Fauna

This section considers the impacts of proposed projects on biotic communities and has overlapping requirements with the next two sections (Threatened and Endangered Species and Wetlands). The requirements of this section are as follows.

1. If a proposed project takes or impacts a publicly-owned wildlife refuge, a special study needs to be prepared.

This requirement does not apply to Bisbee Municipal Airport.

2. For any proposed project it is necessary to consider the impacts on endangered and threatened species, if any (refer to the next section).
3. If the proposed project would affect water resources (i.e., wetlands, groundwater, impoundment, diversion, deepening, controlling, modifying, polluting, dredging, or filling of any stream or body of water), the Fish and Wildlife Coordination Act applies. Consultation should be initiated with both the U.S. Fish and Wildlife Service and with the Arizona Game and Fish Department. Letters should be sought and obtained from both agencies to determine if any proposed actions will damage wildlife resources and to determine mitigating measures, if necessary.

*The Airport Environmental Handbook states (Page 42 - Section 9d1): "If the proposal would impact only man-dominated areas such as previously disturbed airport property, populated areas, or farmland, it may be assumed that there would be no significant impact on biotic communities." Section 9d2 states that if the project "would impact other than man-dominated areas but the impacts would be transient rather than permanent, such as dislocation or other impacts due to construction activities, it may be assumed that there would be no significant impact on biotic communities. The environmental assessment shall document the transient nature of the impacts and any mitigation measure."*

Most of the proposed projects at Bisbee Municipal Airport appear to affect only "man-dominated" areas so that these projects would have no significant impact on biotic communities. The only exception would be the Runway 2-20 extension, which is subject to an Environmental Assessment.

#### **Comments by Jurisdictional Agencies:**

The Arizona Department of Agriculture, Plant Services Division indicated that the proposed airport improvements are not expected to have any significant adverse impacts to protected plant species, and have recommended that if any protected plants are encountered, they be transplanted (*See Exhibit A at the end of this section*).

The United States Department of the Interior, U.S. Fish and Wildlife Service has provided a list of endangered, threatened, proposed, and candidate species that includes all species occurring anywhere in Cochise County. Site-specific surveys have been suggested for evaluation of project-related impacts. This will be a part of the environmental assessment (EA) process for projects which are not categorically excluded. This agency has also recommended protection of any riparian habitat that may be impacted by any future project (*See Exhibit B at the end of this section*).

The Arizona Game & Fish Department has also provided a list of special status species that are known to occur in the Bisbee Airport vicinity. This agency indicates that the

State's wildlife resources will not be adversely impacted as a result of the proposed improvements (*See Exhibit E at the end of this section*).

Threatened and  
Endangered Species

It is necessary for any proposed project to consider the impacts on Threatened and Endangered Species. An "Endangered Species" is defined as any member of the animal or plant kingdom determined to be in danger of extinction throughout all or a significant portion of its range.

A "Threatened Species" is defined as any member of the plant or animal kingdom which are likely to become endangered in the foreseeable future.

**Comments by Jurisdictional Agencies:**

*Refer to the comments documented above under "Biotic Communities - Flora and Fauna".*

Wetlands

Wetlands are defined in Executive Order 11990, "Protection of Wetlands", as "those areas that are inundated by surface or ground water with a frequency sufficient to support, and under normal circumstances does or would support, a prevalence of vegetation or aquatic life that requires saturated or seasonally saturated soil conditions for growth and reproduction. Wetlands generally include swamps, marshes, bogs, and similar areas such as sloughs, potholes, wet meadows, river overflows, and natural ponds."

**Comments by Jurisdictional Agencies:**

The United States Department of Agriculture, Natural Resources Conservation Service has indicated that the proposed improvements will have no adverse impacts upon wetland areas associated with agricultural activities (*See Exhibit D at the end of this section*).

Floodplains

Floodplains are defined by Executive Order 11988, "Floodplain Management", as the lowland and relatively flat areas adjoining coastal water "...including a minimum, that area subject to a one percent or greater chance of flooding in any given year...", that is, an area which would be inundated by a 100-year flood. If a proposed development involves a 100 year floodplain, mitigating measures must be investigated in order to avoid significant changes to the drainage system.

**Comments by Jurisdictional Agencies:**

No comments by jurisdictional agencies were received regarding *Floodplains*.

Coastal Zone  
Management Programs  
and  
Coastal Barriers

The *Airport Environmental Handbook* states (page 53, Section 14a), "The Coastal Barriers Resources Act of 1982...prohibits...Federal financial assistance for development within the Coastal Barrier Resources System which consists of undeveloped coastal barriers along the Atlantic and Gulf Coasts".

Bisbee Municipal Airport is not located within the Coastal Barrier Resource System.

Wild and Scenic  
Rivers

The Wild and Scenic Rivers Act describes those river areas eligible for protection from development. As a general rule these rivers possess outstanding scenic, recreational, geological, fish and wildlife, historical, cultural, or other similar value.

**Comments by Jurisdictional Agencies:**

No comments by jurisdictional agencies were received regarding Wild and Scenic Rivers.

Conversion of  
Farmland

The Farmland Protection Policy Act (FPPA) authorizes the U.S. Department of Agriculture to develop criteria for identifying the effects of Federal programs upon the conversion of farmland to uses other than agriculture.

The proposed actions included in this Master Plan will not affect any existing farmland.

**Comments by Jurisdictional Agencies:**

The United States Department of Agriculture, Farm Service Agency has indicated that the proposed improvements will have no adverse impacts to farmland (*See Exhibit C at the end of this section*).

The United States Department of Agriculture, Natural Resources Conservation Service has indicated that the proposed airport improvements are exempt from the requirements of the FPPA (*See Exhibit D at the end of this section*).

Energy Supply and  
Natural Resources

For most general aviation and non-hub air carrier airport actions, changes in energy demands or other natural resource consumption will not result in significant impacts. This is the case for the proposed projects at Bisbee Municipal Airport.

**Comments by Jurisdictional Agencies:**

No comments by jurisdictional agencies were received regarding Energy Supply and Natural Resources.

Light Emissions

Aviation lighting required for the purpose of obstruction marking, security of parked aircraft and vehicles, and visual aids to navigation are the main source of light emissions emanating from airports. An analysis is necessary only if a proposal would introduce new airport lighting facilities which might affect nearby residential or other sensitive land uses.

The Master Plan for Bisbee Municipal Airport has not programmed any instrument landing system or approach lighting system. The *Airport Environmental Handbook*

states that establishment of an instrument landing system or approach lighting system is an action normally requiring an Environmental Assessment. An Environmental Assessment, therefore, is not necessary.

**Comments by Jurisdictional Agencies:**

No comments by jurisdictional agencies were received regarding Light Emissions.

**Solid Waste Impacts**

Airport development actions which relate only to construction or expansion of runways, taxiways, and related facilities do not normally include any direct relationship to solid waste collection, control, or disposal. All of the "airside" improvements proposed for Bisbee Municipal Airport fit into this category, so no significant impacts to solid waste generation are anticipated.

Any solid waste disposal facility (i.e., sanitary landfill, transfer station, etc.) which is located within 5,000 feet of all runways planned to be used by piston-powered aircraft, or within 10,000 feet of all runways planned to be used by turbine-powered aircraft is considered by the FAA to be an incompatible land use because of the potential for conflicts between bird habitat and low-flying aircraft. Any waste disposal facility which is located within a 5 mile radius of any runway end *"that attracts or sustains hazardous bird movements from feeding, water or roosting areas into, or across the runways and/or approach and departure patterns of aircraft"* is also considered to be incompatible. This determination is contained in paragraph 5 of FAA Order 5200.5A, *FAA Guidance Concerning Sanitary Landfills On or Near Airports*.

Reference to this potential hazard is also made in 40 CFR Part 257, *Criteria for Classification of Solid Waste Disposal Facilities*, section 257.3-8.

There are no existing or planned solid waste disposal sites within 10,000 feet of the runway at Bisbee Municipal Airport. North of the airport property are sewage treatment lagoons. Although these lagoons are within 10,000 feet from the runways, there have been no bird hazard problems in the past.

**Comments by Jurisdictional Agencies:**

No comments by jurisdictional agencies were received regarding Solid Waste Impacts.

**Construction Impacts**

Any construction project will generate short-term environmental impacts. These may include noise and air pollution (dust and exhaust emissions) from construction equipment on the site and traversing nearby neighborhoods, air pollution from burning of refuse, and water pollution from erosion and increased siltation of downstream bodies of water.

These potential impacts can be controlled by requirements and restrictions placed in the Contract Documents and Specifications for each project.

Potential erosion and siltation should be mitigated by incorporation of applicable federal and state standards into the construction contract specifications. Typically, this involves creation and implementation of a Storm Water Pollution Prevention Plan (SWPPP).

As a method of minimizing noise and air pollution caused by construction equipment, the contractor's equipment access be routed to avoid the most sensitive adjacent areas and to contain the adverse impacts as much as possible to the airport property.

The access routes and limitations should be defined on the construction plans and in the specifications, as appropriate.

Dust pollution should be specifically mitigated by requiring appropriate dust control measures as part of the construction specifications.

Coordination with the Arizona Department of Environmental Quality may be necessary during the development of construction plans and during the construction activities.

Improvements involving excavation could uncover archaeological, cultural or human skeletal remains. It is recommended that any set of contract documents and specifications include a provision for the contractor to stop work and to contact the State Historic Preservation Office in the event of a potential archeological, cultural or skeletal discovery.

If construction activities involve channelization or earthmoving within a "Water of the United States", a 404 permit will need to be obtained from the U.S. Army Corps of Engineers prior to commencement of construction.

**Comments by Jurisdictional Agencies:**

The Department of the Army, Los Angeles District Corps of Engineers has commented that a Section 404 Permit may be required for some of the proposed airport improvements recommended in this master Plan (*see Exhibit G at the end of this section*).

SUMMARY OF  
FINDINGS

There is one proposed project that would require preparation of an Environmental Assessment and issuance of a FONSI, the paving and extension of Runway 2-20. The Environmental Assessment for this project should address all applicable items listed in FAA Order 5050.4.

Other proposed projects which may involve the use of federal or state funds, other than FAA or ADOT-Aeronautics funds, may be subject to other permitting requirements:

- A permit issued under Section 404 of the Clean Water Act may be necessary for any discharge of dredged or fill materials into the "waters of the United States", including adjacent wetlands. Activities that require a Section 404 permit include placing bank protection, temporary or permanent stockpiling of excavated material, grading roads, grading (including vegetative clearing operations) that involves the filling of low areas or leveling of land, constructing weirs or diversion dikes, constructing approach fills, and discharging dredged or fill material as a part of any other activity.
- Plans for renovation of any building should consider the existence of asbestos or other hazardous materials.

The City of Bisbee should enact airport-related ordinances to control the use of land surrounding the airport.



SHELDON R. JONES  
Director



G. JOHN CARAVETTA  
Associate Director

# Arizona Department of Agriculture

1688 West Adams, Phoenix, Arizona 85007  
(602) 542-4373 FAX (602) 542-0999

PLANT SERVICES DIVISION

EXHIBIT A

June 7, 1999

Gannett Fleming, Inc.  
Kristina M. Fields  
Project Engineer  
Suite 130  
3001 East Camelback Road  
Phoenix, AZ 85016-4498

RE: Bisbee Municipal Airport  
Master Plan  
GF Job No. 36187  
Environmental Issues

Dear M. Fields:

The Arizona Department of Agriculture has reviewed the referenced material.

Based on the information provided, the project is not expected to have any significant adverse impact to protected plant species. The Department recommends that if any protected plants exist on site, they be avoided or transplanted, preferably on site.

We appreciate the opportunity to review the proposed action. If you need additional information, please contact me at 602/542-3292.

Sincerely,

A handwritten signature in cursive script that reads "James McGinnis".

James McGinnis  
Chief Enforcement Officer  
Native Plants/Antiquities

JM:clw



# United States Department of the Interior

## U.S. Fish and Wildlife Service

2321 W. Royal Palm Road, Suite 103

Phoenix, Arizona 85021-4951

(602)640-2720 FAX (602)640-2730



In Reply Refer To:

AESO/SE

2-21-99-I-238

June 10, 1999

EXHIBIT B

Ms. Kristina M. Fields  
Project Engineer  
Gunnnett Fleming Engineers and Planners  
3001 East Camelback Road, Suite 130  
Phoenix, Arizona 85016-4498

RE: Bisbee Municipal Airport Master Plan (GF Job No. 36187)

Dear Ms. Fields:

This letter responds to your June 1, 1999, request for an inventory of threatened or endangered species, or those that are proposed to be listed as such under the Endangered Species Act of 1973, as amended (Act), which may potentially occur in your project area (Cochise County). The enclosed list may include candidate species as well. We hope the enclosed county list of species will be helpful. In future communications regarding this project, please refer to consultation number 2-21-99-I-238.

The enclosed list of the endangered, threatened, proposed, and candidate species includes all those potentially occurring anywhere in the county, or counties, where your project occurs. Please note that your project area may not necessarily include all or any of these species. The information provided includes general descriptions, habitat requirements, and other information for each species on the list. Also on the enclosed list is the Code of Federal Regulations (CFR) citation for each listed or proposed species. Additional information can be found in the CFR and is available at most public libraries. This information should assist you in determining which species may or may not occur within your project area. Site-specific surveys could also be helpful and may be needed to verify the presence or absence of a species or its habitat as required for the evaluation of proposed project-related impacts.

Endangered and threatened species are protected by Federal law and must be considered prior to project development. If the action agency determines that listed species or critical habitat may be adversely affected by a federally funded, permitted, or authorized activity, the action agency must request formal consultation with the Service. If the action agency determines that the planned action may jeopardize a proposed species or destroy or adversely modify proposed critical habitat, the action agency must enter into a section 7 conference with the Service. Candidate species are those which are being considered for addition to the list of threatened or endangered species. Candidate species are those for which there is sufficient information to support a proposal for listing. Although candidate species have no legal protection under the

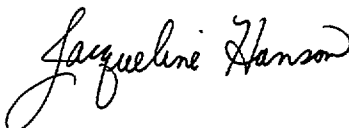
Act, we recommend that they be considered in the planning process in the event that they become listed or proposed for listing prior to project completion.

If any proposed action occurs in or near areas with trees and shrubs growing along watercourses, known as riparian habitat, the Service recommends the protection of these areas. Riparian areas are critical to biological community diversity and provide linear corridors important to migratory species. In addition, if the project will result in the deposition of dredged or fill materials into waterways or excavation in waterways, we recommend you contact the Army Corps of Engineers which regulates these activities under Section 404 of the Clean Water Act.

The State of Arizona protects some plant and animal species not protected by Federal law. We recommend you contact the Arizona Game and Fish Department and the Arizona Department of Agriculture for State-listed or sensitive species in your project area.

The Service appreciates your efforts to identify and avoid impacts to listed and sensitive species in your project area. If we may be of further assistance, please feel free to contact Tom Gatz (x240).

Sincerely,

  
for David L. Harlow  
Field Supervisor

Enclosure

cc: Director, Arizona Game and Fish Department, Phoenix, AZ

03/25/1999

## 1) LISTED

TOTAL= 21

NAME: CANELO HILLS LADIES' TRESSES

*SPIRANTHES DELITESCENS*

STATUS: ENDANGERED

CRITICAL HAB No RECOVERY PLAN: No CFR: 62 FR 665, 01-06-97

DESCRIPTION: SLENDER ERECT MEMBER OF THE ORCHID FAMILY (ORCHIDACEAE).

FLOWER: STALK 50 CM TALL, MAY CONTAIN 40 WHITE FLOWERS

SPIRALLY ARRANGED ON THE FLOWERING STALK.

ELEVATION

RANGE: about 5000 FT.

COUNTIES: COCHISE, SANTA CRUZ

HABITAT: FINELY GRAINED, HIGHLY ORGANIC, SATURATED SOILS OF CIENEGAS

POTENTIAL HABITAT OCCURS IN SONORA, MEXICO, BUT NO POPULATIONS HAVE BEEN FOUND.

NAME: COCHISE PINCUSHION CACTUS

*CORYPHANTHA ROBBINSORUM*

STATUS: THREATENED

CRITICAL HAB No RECOVERY PLAN: Yes CFR: 51 FR 952, 1-9-1986

DESCRIPTION: A SMALL UNBRANCHED CACTUS WITH NO CENTRAL SPINES AND 11-17

WHITE RADIAL SPINES. THE BELL-SHAPED FLOWERS ARE BORNE ON

THE ENDS OF TUBERCLES (Protrusions). FLOWERS: BELL SHAPED,

PALE YELLOW-GREEN. FRUITS: ORANGE-RED TO RED

ELEVATION

RANGE: &gt;4200 FT.

COUNTIES: COCHISE AND SONORA, MEXICO

HABITAT: SEMIDESERT GRASSLAND WITH SMALL SHRUBS, AGAVE, OTHER CACTI, AND GRAMA GRASS.

GROWS ON GRAY LIMESTONE HILLS.

NAME: HUACHUCA WATER UMBEL

*LILAEOPSIS SCHAFFNERIANA ssp RECURVA*

STATUS: ENDANGERED

CRITICAL HAB Yes RECOVERY PLAN: No CFR: 62 FR 665, 01-06-97

DESCRIPTION: HERBACEOUS, SEMI-AQUATIC PERENNIAL IN THE PARSLEY FAMILY

(UMBELLIFERAE) WITH SLENDER ERECT, HOLLOW, LEAVES THAT GROW

FROM THE NODES OF CREEPING RHIZOMES. FLOWER: 3 TO 10

FLOWERED UMBELS ARISE FROM ROOT NODES.

ELEVATION

RANGE: 3500-6500 FT.

COUNTIES: PIMA, SANTA CRUZ, COCHISE

HABITAT: CIENEGAS, PERENNIAL LOW GRADIENT STREAMS, WETLANDS

AND IN ADJACENT SONORA, MEXICO, WEST OF THE CONTINENTAL DIVIDE. POPULATIONS ALSO ON FORT HUACHUCA MILITARY RESERVATION. PROPOSED CRITICAL HABITAT IN COCHISE AND SANTA CRUZ COUNTIES (63 FR 71838)

LISTED, PROPOSED, AND CANDIDATE SPECIES FOR THE FOLLOWING COUNTY:

COCHISE

03/25/1999

NAME: LESSER LONG-NOSED BAT

*LEPTONYCTERIS CURASOAE YERBABUENAE*

STATUS: ENDANGERED

CRITICAL HAB No RECOVERY PLAN: Yes CFR: 53 FR 38456, 09-30-88

DESCRIPTION: ELONGATED MUZZLE, SMALL LEAF NOSE, AND LONG TONGUE.  
YELLOWISH BROWN OR GRAY ABOVE AND CINNAMON BROWN BELOW.  
TAIL MINUTE AND APPEARS TO BE LACKING. EASILY DISTURBED.

ELEVATION  
RANGE: <6000 FT.

COUNTIES: COCHISE, PIMA, SANTA CRUZ, GRAHAM, PINAL, MARICOPA

HABITAT: DESERT SCRUB HABITAT WITH AGAVE AND COLUMNAR CACTI PRESENT AS FOOD PLANTS

DAY ROOSTS IN CAVES AND ABANDONED TUNNELS. FORAGES AT NIGHT ON NECTAR, POLLEN, AND FRUIT OF PANICULATE AGAVES AND COLUMNAR CACTI. THIS SPECIES IS MIGRATORY AND IS PRESENT IN ARIZONA, USUALLY FROM APRIL TO SEPTEMBER AND SOUTH OF THE BORDER THE REMAINDER OF THE YEAR.

NAME: MEXICAN GRAY WOLF

*CANIS LUPUS BAILEYI*

STATUS: ENDANGERED

CRITICAL HAB No RECOVERY PLAN: Yes CFR: 32 FR 4001, 03-11-67; 43

DESCRIPTION: LARGE DOG-LIKE CARNIVORE WITH VARYING COLOR, BUT USUALLY A  
SHADE OF GRAY. DISTINCT WHITE LIP LINE AROUND MOUTH. WEIGH 60-  
90 POUNDS.

FR 1912, 03-09-78

ELEVATION  
RANGE: 4,000-12,000 FT.

COUNTIES: APACHE, COCHISE, GREENLEE, PIMA, SANTA CRUZ

HABITAT: CHAPPARAL, WOODLAND, AND FORESTED AREAS. MAY CROSS DESERT AREAS.

HISTORIC RANGE IS CONSIDERED TO BE LARGER THAN THE COUNTIES LISTED ABOVE. UNCONFIRMED REPORTS OF INDIVIDUALS IN THE SOUTHERN PART OF THE STATE (COCHISE, PIMA, SANTA CRUZ) CONTINUE TO BE RECEIVED. INDIVIDUALS MAY STILL PERSIST IN MEXICO. EXPERIMENTAL NONESSENTIAL POPULATION INTRODUCED IN THE BLUE PRIMITIVE AREA OF GREENLEE AND APACHE COUNTIES.

NAME: OCELOT

*LEOPARDUS (=FELIS) PARDALIS*

STATUS: ENDANGERED

CRITICAL HAB No RECOVERY PLAN: Yes CFR: 47 FR 31670; 07-21-82

DESCRIPTION: MEDIUM-SIZED SPOTTED CAT WHOSE TAIL IS ABOUT 1/2 THE LENGTH  
OF HEAD AND BODY. YELLOWISH WITH BLACK STREAKS AND STRIPES  
RUNNING FROM FRONT TO BACK. TAIL IS SPOTTED AND FACE IS LESS  
HEAVILY STREAKED THAN THE BACK AND SIDES.

ELEVATION  
RANGE: <8000 FT.

COUNTIES: SANTA CRUZ, PIMA, COCHISE

HABITAT: HUMID TROPICAL & SUB-TROPICAL FORESTS, SAVANNAHS, AND SEMI-ARID THORNSCRUB.

MAY PERSIST IN PARTLY-CLEARED FORESTS, SECOND-GROWTH WOODLAND, AND ABANDONED CULTIVATION REVERTED TO BRUSH. UNIVERSAL COMPONENT IS PRESENCE OF DENSE COVER. UNCONFIRMED REPORTS OF INDIVIDUALS IN THE SOUTHERN PART OF THE STATE CONTINUE TO BE RECEIVED.

LISTED, PROPOSED, AND CANDIDATE SPECIES FOR THE FOLLOWING COUNTY:

COCHISE

03/25/1999

NAME: YAQUI TOPMINNOW

*POECILIOPSIS OCCIDENTALIS SONORIENSIS*

STATUS: ENDANGERED

CRITICAL HAB No RECOVERY PLAN: Yes CFR: 32 FR 4001, 03-11-1967

DESCRIPTION: SMALL (2 INCHES) TOPMINNOW GUPPY-LIKE, LIVE BEARING, LACKING  
DARK SPOTS. BREEDING MALES JET BLACK WITH YELLOW FINS.

ELEVATION

RANGE: <4500 FT.

COUNTIES: COCHISE

HABITAT: SMALL TO MODERATE SIZED STREAMS, SPRINGS, & CIENEGAS GENERALLY IN SHALLOWS

NAME: AMERICAN PEREGRINE FALCON

*FALCO PEREGRINUS ANATUM*

STATUS: ENDANGERED

CRITICAL HAB No RECOVERY PLAN: Yes CFR: 35 FR 16047, 10-13-70; 35  
FR 8495, 06-02-70

DESCRIPTION: A RECLUSIVE, CROW-SIZED FALCON SLATY BLUE ABOVE WHITISH  
BELOW WITH FINE DARK BARRING. THE HEAD IS BLACK AND APPEARS  
TO BE MASKED OR HELMETED. WINGS LONG AND POINTED. LOUD  
WAILING CALLS ARE GIVEN DURING BREEDING PERIOD.

ELEVATION

RANGE: 3500-9000 FT.

COUNTIES: MOHAVE COCONINO NAVAJO APACHE SANTA CRUZ MARICOPA COCHISE YAVAPAI GILA PINAL PIMA  
GREENLEE GRAHAM YUMA

HABITAT: CLIFFS AND STEEP TERRAIN USUALLY NEAR WATER OR WOODLANDS WITH ABUNDANT PREY

THIS IS A WIDE-RANGING MIGRATORY BIRD THAT USES A VARIETY OF HABITATS. BREEDING BIRDS ARE YEAR-  
ROUND RESIDENTS. OTHER BIRDS WINTER AND MIGRATE THROUGH ARIZONA. SPECIES IS ENDANGERED FROM  
REPRODUCTIVE FAILURE FROM PESTICIDES. SPECIES HAS BEEN PROPOSED FOR DELISTING (63 FR 45446) BUT  
STILL RECEIVES FULL PROTECTION UNDER ESA

NAME: BALD EAGLE

*HALIAEETUS LEUCOCEPHALUS*

STATUS: THREATENED

CRITICAL HAB No RECOVERY PLAN: Yes CFR: 60 FR 35999, 07-12-95

DESCRIPTION: LARGE, ADULTS HAVE WHITE HEAD AND TAIL. HEIGHT 28 - 38";  
WINGSPAN 66 - 96". 1-4 YRS DARK WITH VARYING DEGREES OF  
MOTTLED BROWN PLUMAGE. FEET BARE OF FEATHERS.

ELEVATION

RANGE: VARIES FT.

COUNTIES: YUMA, LA PAZ, MOHAVE, YAVAPAI, MARICOPA, PINAL, COCONINO, NAVAJO, APACHE, SANTA CRUZ, PIMA,  
GILA, GRAHAM, COCHISE

HABITAT: LARGE TREES OR CLIFFS NEAR WATER (RESERVOIRS, RIVERS AND STREAMS) WITH ABUNDANT PREY

SOME BIRDS ARE NESTING RESIDENTS WHILE A LARGER NUMBER WINTERS ALONG RIVERS AND RESERVOIRS.  
AN ESTIMATED 200 TO 300 BIRDS WINTER IN ARIZONA. ONCE ENDANGERED (32 FR 4001, 03-11-1967; 43 FR 6233, 02-  
14-78) BECAUSE OF REPRODUCTIVE FAILURES FROM PESTICIDE POISONING AND LOSS OF HABITAT, THIS  
SPECIES WAS DOWN LISTED TO THREATENED ON AUGUST 11, 1995. ILLEGAL SHOOTING, DISTURBANCE, LOSS OF  
HABITAT CONTINUES TO BE A PROBLEM.

LISTED, PROPOSED, AND CANDIDATE SPECIES FOR THE FOLLOWING COUNTY:

COCHISE

03/25/1999

NAME: SOUTHWESTERN WILLOW FLYCATCHER *EMPIDONAX TRILLII EXTIMUS*

STATUS: ENDANGERED CRITICAL HAB Yes RECOVERY PLAN: No CFR: 60 FR 10694, 02-27-95

DESCRIPTION: SMALL PASSERINE (ABOUT 6") GRAYISH-GREEN BACK AND WINGS,  
WHITISH THROAT, LIGHT OLIVE-GRAY BREAST AND PALE YELLOWISH  
BELLY. TWO WINGBARS VISIBLE. EYE-RING FAINT OR ABSENT.

ELEVATION  
RANGE: <8500 FT.

COUNTIES: YAVAPAI, GILA, MARICOPA, MOHAVE, COCONINO, NAVAJO, APACHE, PINAL, LA PAZ, GREENLEE, GRAHAM,  
YUMA, PIMA, COCHISE, SANTA CRUZ

HABITAT: COTTONWOOD/WILLOW & TAMARISK VEGETATION COMMUNITIES ALONG RIVERS & STREAMS

MIGRATORY RIPARIAN OBLIGATE SPECIES THAT OCCUPIES BREEDING HABITAT FROM LATE APRIL TO  
SEPTEMBER. DISTRIBUTION WITHIN ITS RANGE IS RESTRICTED TO RIPARIAN CORRIDORS. DIFFICULT TO  
DISTINGUISH FROM OTHER MEMBERS OF THE EMPIDONAX COMPLEX BY SIGHT ALONE. TRAINING SEMINAR  
REQUIRED FOR THOSE CONDUCTING FLYCATCHER SURVEYS. CRITICAL HABITAT ON PORTIONS OF THE 100-YEAR  
FLOODPLAIN ON SAN PEDRO AND VERDE RIVERS; WET BEAVER AND WEST CLEAR CREEKS, INCLUDING TAVASCI  
MARSH AND ISTER FLAT; THE COLORADO RIVER, THE LITTLE COLORADO RIVER, AND THE WEST, EAST, AND  
SOUTH FORKS OF THE LITTLE COLORADO RIVER, REFERENCE 60 CFR:62 FR 39129, 7/22/97.

NAME: WHOOPING CRANE *GRUS AMERICANA*

STATUS: ENDANGERED CRITICAL HAB Yes RECOVERY PLAN: Yes CFR: 32 FR 4001, 03-11-1967; 43  
DESCRIPTION: TALLEST AMERICAN BIRD (UP TO 5 FEET) SNOWY WHITE, LONG NECK  
AND LEGS, BLACK WING TIPS, RED CROWN, AND BLACK WEDGE  
FR 20938, 05-15-78

ELEVATION  
RANGE: 4500 FT.

COUNTIES: COCHISE

HABITAT: MARSHES, PRAIRIES, RIVER BOTTOMS

BIRDS IN THE ROCKY MOUNTAIN POPULATION ARE OCCASIONAL VISITORS IN ARIZONA DURING MIGRATION.  
USUALLY NEAR WILCOX PLAYA.

NAME: SONORA TIGER SALAMANDER *AMBYSTOMA TIGRINUM STEBBINSI*

STATUS: ENDANGERED CRITICAL HAB No RECOVERY PLAN: No CFR: 62 FR 665, 01-06-97

DESCRIPTION: 2.6 TO 4.9" SNOUT-VENT LENGTH WITH LIGHT-COLORED BANDS ON A  
DARK BACKGROUND. AQUATIC LARVAE ARE UNIFORM DARK COLOR  
WITH PLUME-LIKE GILLS AND TAIL FINS.

ELEVATION  
RANGE: 4000-6300 FT.

COUNTIES: SANTA CRUZ, COCHISE

HABITAT: STOCK TANKS AND IMPOUNDED CIENEGAS IN SAN RAFAEL VALLEY, HUACHUCA MOUNTAINS

ALSO OCCURS IN THE FOOTHILLS OF THE EAST SLOPE OF THE PATAGONIA AND HUACHUCA MOUNTAINS.  
POPULATIONS ALSO ON FORT HUACHUCA.

03/25/1999

## 3) CANDIDATE

TOTAL= 4

NAME: LEMMON FLEABANE

*ERIGERON LEMMONII*

STATUS: CANDIDATE

CRITICAL HAB No RECOVERY PLAN: No CFR:

DESCRIPTION: A PROSTRATE PERENNIAL IN THE SUNFLOWER FAMILY. STEMS AND LEAVES ARE DENSELY HAIRY. FLOWERS LOOK LIKE SMALL DELICATE DAISIES, WITH WHITE TO LIGHT PURPLE OUTER PETALS AND YELLOW INNER PETALS.

ELEVATION  
RANGE: 1500-6000 FT.

COUNTIES: COCHISE

HABITAT: GROWS IN DENSE CLUMPS IN CREVICES, LEDGES, AND BOULDERS IN CANYON BOTTOMS IN PINE-OAK WOODLAND

ONE SITE ON FORT HUACHUCA MILITARY RESERVATION

NAME: GILA CHUB

*GILA INTERMEDIA*

STATUS: CANDIDATE

CRITICAL HAB No RECOVERY PLAN: No CFR:

DESCRIPTION: DEEP COMPRESSED BODY, FLAT HEAD. DARK OLIVE-GRAY COLOR ABOVE, SILVER SIDES. ENDEMIC TO GILA RIVER BASIN.

ELEVATION  
RANGE: 2000 - 3500 FT.

COUNTIES: SANTA CRUZ, GILA, GREENLEE, PIMA, COCHISE, GRAHAM, YAVAPAI

HABITAT: POOLS, SPRINGS, CIENEGAS, AND STREAMS

MULTIPLE PRIVATE LANDOWNERS, INCLUDING THE NATURE CONSERVANCY, THE AUDUBON SOCIETY, AND OTHERS. ALSO FT. HUACHUCA. SPECIES ALSO FOUND IN SONORA, MEXICO.

NAME: HUACHUCA SPRINGSNAIL

*PYRGULOPSIS THOMPSONI*

STATUS: CANDIDATE

CRITICAL HAB No RECOVERY PLAN: No CFR:

DESCRIPTION: VERY SMALL (1.7-3.2mm) CONICAL SHELL. IDENTIFICATION MUST BE VERIFIED BY CHARACTERISTICS OF REPRODUCTIVE ORGANS.

ELEVATION  
RANGE: 4500-6000 FT.

COUNTIES: COCHISE, SANTA CRUZ

HABITAT: AQUATIC AREAS, SMALL SPRINGS WITH VEGETATION SLOW TO MODERATE FLOW.

INDIVIDUALS FOUND ON FIRM SUBSTANCES (ROOTS, WOOD, AND ROCKS) OTHER POPULATIONS FOUND ON FORT HUACHUCA MILITARY PROPERTY



LISTED, PROPOSED, AND CANDIDATE SPECIES FOR THE FOLLOWING COUNTY:

COCHISE

03/25/1999

## CONSERVATION AGREEMENT

TOTAL= 1

NAME: RAMSEY CANYON LEOPARD FROG

*RANA SUBAQUAVOCALIS*

STATUS: NONE

CRITICAL HAB No RECOVERY PLAN: No CFR:

DESCRIPTION: BROWN OR GREEN FROG, 2.5 TO 4 INCHES LONG; SPOTS ROUNDED

WITH LIGHT BORDERS; DORSOLATERAL FOLDS ARE INTERRUPTED

POSTERIORLY AND DEFLECTED MEDIALY; YELLOWISH PIGMENTATION

ON THE GROIN WHICH MAY EXTEND INTO THE POSTERIOR VENTER

ELEVATION

RANGE: 5,000 FT FT.

COUNTIES: COCHISE

HABITAT: STTREAM AND PONDED AQUATIC HABITATS

CONSERVATION AGREEMENT BETWEEN THE SERVICE, ARIZONA GAME AND FISH DEPARTMENT, THE NATURE CONSERVANCY, BUREAU OF LAND MANAGEMENT, CORONADO NATIONAL FOREST, THE US ARMY INTELLIGENCE CENTER AND FORT HUACHUCA, AND A PRIVATE LANDOWNER WAS FINALIZED JULY 1996



FARM SERVICE  
AGENCY

ARIZONA STATE OFFICE  
77 E. THOMAS ROAD, SUITE 240  
PHOENIX, AZ 85012-3118



June 28, 1999

**TO:** Kristina M. Fields, Project Engineer  
Gannett Fleming, Inc.  
Suite 130  
3001 East Camelback Road  
Phoenix, AZ 85016-4498

**EXHIBIT C**

**SUBJECT:** Bisbee Municipal Airport

Farm Service Agency has reviewed the information you submitted in regards to the proposed Bisbee Municipal Airport Master Plan. We see no adverse environmental issues that may impact future construction from the Farm Service Agency perspective.

Respectfully submitted,

George Arredondo,  
State Executive Director,  
USDA, Farm Service Agency



United States  
Department of  
Agriculture

Natural  
Resources  
Conservation  
Service

3003 N. Central Ave.  
Suite 800  
Phoenix, AZ  
85012-2945

Ms. Kristina M. Fields  
Project Engineer  
Gannett Fleming, Inc.  
3001 East Camelback Road, Suite 130  
Phoenix, Arizona 85016-4498

Dear Ms. Fields:

July 1, 1999

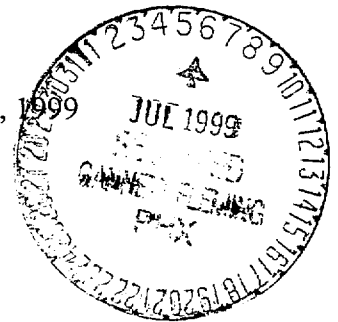


EXHIBIT D

This response is in regard to your letter dated June 1, 1999, concerning the Airport Master Plan for the Bisbee Municipal Airport in Bisbee, Arizona.

The Natural Resources Conservation Service (NRCS) has general responsibility, nationwide, for implementing the Farmland Protection Policy Act (FPPA) and to review projects that may affect prime farmland and/or wetlands associated with agriculture. After reviewing the information provided, the following is noted:

- 1- The Bisbee Airport Master Plan, if implemented as planned, is exempt from the requirements of the FPPA - as revised in 1994, that excludes land which is already in or is committed to urban development, currently used as water storage, or land that is not prime or unique farmland.
- 2- We do not see any immediate concerns or impacts that would directly affect wetland areas associated with agricultural activities.

Should you have questions, please feel free contact Jeff Schmidt, Community Assistance Coordinator at 602/280.8818. Thank you again for the chance to review the proposed project.

Sincerely,

  
MICHAEL SOMERVILLE  
State Conservationist

cc:

Xavier Montoya, District Conservationist, NRCS, Douglas, Arizona  
Jim Briggs, Assistant State Conservationist, NRCS, Phoenix, Arizona  
Jeff Schmidt, Community Assistance Coordinator, NRCS, Phoenix, Arizona

THE STATE



OF ARIZONA

## GAME & FISH DEPARTMENT

2221 West Greenway Road, Phoenix, Arizona 85023-4399 (602) 972-3000  
www.gf.state.az.us

Tucson Office, 555 N. Greasewood Rd., Tucson, AZ 85745

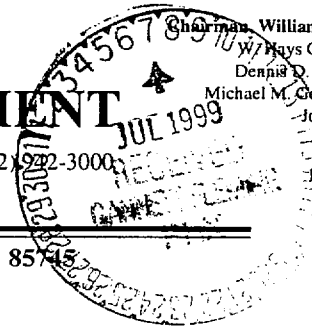
Governor  
Jane Dee Hull

Commissioners:

Chairman, William Berlat, Tucson  
W. Hays Gilstrap, Phoenix  
Dennis D. Manning, Alpine  
Michael M. Golightly, Flagstaff  
Joe Carter, Safford

Director  
Duane L. Shroufe

Deputy Director  
Steve K. Ferrell



July 2, 1999

EXHIBIT E

Ms. Kristina Fields  
Gannett Fleming, Inc.  
3001 E. Camelback Road, Ste. 130  
Phoenix, Arizona 85016-4498

Re: Bisbee Municipal Airport Master Plan; T24S, R24E, Section 2.

Dear Ms. Fields:

The Arizona Game & Fish Department (Department) has reviewed the above-referenced project for its potential to adversely affect special status species, habitats of special concern, and other significant wildlife resources. Due to time and personnel constraints, we were unable to do an on-the-ground review of resource conditions. However, knowledge of the area, aerial photographs, and other reference materials facilitated our review.

Attached is a list of special status species that are known to occur in the vicinity of the above-referenced project site (Attachment A). This list is based on the review of records in the Department's Heritage Data Management System<sup>1</sup> (HDMS). However, the Department does not anticipate that the State's wildlife resources will be adversely impacted as the result of implementing the proposed project.

Please call me at 520/628-5982 ext. 137 if you have questions.

Sincerely,

A handwritten signature in black ink, appearing to read "Sherry A. Ruther".

Sherry A. Ruther  
Habitat Specialist

SAR:sr

<sup>1</sup> Information contained in the Department's HDMS is dynamic and updated on a periodic basis. Any information, therefore, is likely to become outdated shortly after its release. Such information is intended to serve as a guide regarding what species may be found in a particular area. It does not represent the results of comprehensive species-specific surveys.

Ms. Fields  
July 2, 1999  
3

**ATTACHMENT A  
SPECIAL STATUS SPECIES  
BISBEE MUNICIPAL AIRPORT**

<u>COMMON NAME</u>	<u>SCIENTIFIC NAME</u>	<u>STATUS</u>
black-necked stilt	<i>Himantopus mexicanus</i>	S
Texas rainbow cactus	<i>Echinocereus pectinatus pectinatus</i>	SR
Wislizeni gentian	<i>Gentianella wislizeni</i>	SR

**STATUS DEFINITIONS**

- S - **Sensitive.** Species classified as "**sensitive**" by the Regional Forester when occurring on lands managed by the U.S.D.A. Forest Service.
- SR - **Salvage Restricted.** Those Arizona native plants not included in the Highly Safeguarded Category, but that have a high potential for theft or vandalism, as described by the Arizona Native Plant Law (1993).

Jane Dee Hull  
Governor

Michael E. Anable  
State Land  
Commissioner

Arizona  
State Land Department

1616 West Adams Street Phoenix, AZ 85007 [www.land.state.az.us](http://www.land.state.az.us)



EXHIBIT F

July 13, 1999

Kristina M. Fields  
Project Engineer  
Klannett Fleming, Inc.  
3001 East Camelback Road  
Phoenix, Arizona 85016-4498

Dear Ms. Fields:

Thank you for the opportunity to comment on the master plan for the Bisbee Municipal District.

No mention was made of the types of aircraft that will be using the airport. If larger aircraft eventually use the airport, this could impact the complexion of land uses surrounding the airport.

Absent in the proposal is any mention of land uses existing and/or proposed. It is suggested that you expand the scope of the discussion to include references to noise impacts as well as land impacts.

It would be helpful to see any general plan maps addressing proposed land uses and any considerations for changing the plan based upon these improvements. Future plans should not only include the proposed improvements, but, also LDN contours identifying noise decibels as well as any general plans and any proposed changes to the general plan resultant of the airport expansion.

If you have any questions, please contact me at (602) 542-2657.

Sincerely,

A handwritten signature in cursive script, reading "William Dowdle".

William Dowdle  
Environmental Resource & Trespass Section

WD/kl  
07/13/99



REPLY TO  
ATTENTION OF:

Office of the Chief  
Regulatory Branch

**DEPARTMENT OF THE ARMY**  
LOS ANGELES DISTRICT, CORPS OF ENGINEERS  
ARIZONA-NEVADA AREA OFFICE  
3636 NORTH CENTRAL AVENUE, SUITE 760  
PHOENIX, ARIZONA 85012-1936

EXHIBIT G

September 23, 1999

Ms. Kristina M. Fields  
Gannett Fleming, Inc.  
3001 East Camelback Road, Suite 130  
Phoenix, Arizona 85016-4498

File Number: 1999-16357-EHB

Dear Ms. Fields:

It has come to our attention that you are in the process of preparing an Airport Master Plan to identify environmental issues and responsibilities related to the future development of the Bisbee Municipal Airport in (Sections 2 and 11, T24S, R24E), Bisbee, Cochise County, Arizona.

This activity may require a Department of the Army permit issued under Section 404 of the Clean Water Act. A Section 404 permit is required for the discharge of dredged or fill material into the "waters of the United States," including adjacent wetlands. Examples of activities requiring a permit are placing bank protection, temporary or permanent stock-piling of excavated material, grading roads, grading (including vegetative clearing operations) that involves the filling of low areas or leveling the land, constructing weirs or diversion dikes, constructing approach fills, and discharging dredged or fill material as part of any other activity.

Enclosed you will find a permit application form and a pamphlet that describes our regulatory program. If you have questions, please contact Elizabeth H. Brooks at (602) 640-5385 x 223. Please refer to file number 1999-16357-EHB in your reply.

Sincerely,

Cindy Lester  
Chief, Arizona Section  
Regulatory Branch

Enclosure(s)